IN THE CLAIMS:

Please cancel Claims 7, 8, 11-13, 15 and 16 without prejudice to or disclaimer of the recited subject matter.

Please amend Claims 1, 3, 5, 6, 9, 10 and 14 as follows.

1. (Currently Amended) An information processing method of receiving image data compression-coded for each ~~tile~~ spatial rectangle region and encrypting the image data, comprising:

repeatedly forming one spatial rectangle region ~~tile~~ group from a plurality of adjacent spatial rectangle regions ~~tiles~~ in an image space and another spatial rectangle region ~~tile~~ group from adjacent spatial rectangle region ~~tile~~ groups so as to define a hierarchical structure of the spatial rectangle region ~~tile~~ groups;

assigning identification information uniquely identifying each node to each node in the hierarchal structure;

generating encryption key information of an uppermost layer for an entire image expressed by encoded data;

executing, up to a ~~tile~~ node located at a terminal, processing for generating encryption key information for a ~~tile group of a tile located at a lower layer~~ node of interest on the basis of encryption key information generated for a ~~tile group~~ node located at an upper layer in the hierarchical structure, the identification information assigned to the node of interest, and a one-way function, so as to generate encryption keys for each spatial rectangle region~~tile~~;

designating a desired spatial rectangle region ~~tile~~ group in a desired layer as an object to be encrypted in a tree structure of the spatial rectangle region ~~tile~~ groups; and

executing encryption processing for each spatial rectangle region~~tile~~, each of which is located at a lower layer belonging to the designated spatial rectangle region ~~tile~~ group, by using an encryption key generated for ~~the tile~~each spatial rectangle region.

2. (Canceled)

3. (Currently Amended) The method according to claim 2, wherein the function generates the key information by using coordinate position information of a spatial rectangle region ~~tile~~ group or a spatial rectangle region ~~tile~~ located at the lower layer.

4. (Original) The method according to claim 1, wherein the encryption key information of the uppermost layer is output to a predetermined authentication server on the Internet.

5. (Currently Amended) The method according to claim 1, wherein

the method further comprises a step of displaying the received encoded data as a hierarchical structure of spatial rectangle regions ~~tiles~~ and spatial rectangle region ~~tile~~ groups, and

the desired spatial rectangle region ~~tile~~ group of the desired layer is designated from the hierarchical structure displayed in the display step.

6. (Currently Amended) An information processing apparatus for receiving image data compression-coded for each spatial rectangle region ~~tile~~ and encrypting the image data, comprising:

means for repeatedly forming one spatial rectangle region ~~tile~~ group ~~form~~ from a plurality of adjacent spatial rectangle regions ~~tiles~~ in an image space and another spatial rectangle region ~~tile~~ group from adjacent spatial rectangle region ~~tile~~ groups so as to define a hierarchical structure of the spatial rectangle region ~~tile~~ groups;

means for assigning identification information uniquely identifying each node to each node in the hierarchal structure;

means for generating encryption key information of an uppermost layer for an entire image expressed by encoded data;

means for executing, up to a ~~tile~~ node located at a terminal, processing for generating encryption key information for a ~~tile group or a tile located at a lower layer~~ node of interest on the basis of encryption key information generated for a ~~tile group~~ node located at an upper layer in the hierarchical structure, the identification information assigned to the node of interest, and a one-way function, so as to generate encryption keys for each spatial rectangle region~~tile~~;

means for designating a desired spatial rectangle region ~~tile~~ group in a desired layer as an object to be encrypted in a tree structure of the spatial rectangle region ~~tile~~ groups; and

means for executing encryption processing for each spatial rectangle region~~tile~~, each of which is located at a lower layer belonging to the designated spatial rectangle region ~~tile~~ group, by using an encryption key generated for the spatial rectangle region~~tile~~.

7-8. (Canceled)

9. (Currently Amended) An information processing method of receiving information containing encoded image data compression-coded for each spatial rectangle region which constitutes an image, said encoded image data containing~~of~~ both of encrypted and unencrypted spatial rectangle regions, ~~tiles~~ and reproducing an image, comprising:

repeatedly forming one spatial rectangle region ~~tile~~ group from a plurality of adjacent spatial rectangle regions ~~tiles~~ in an image space and another spatial rectangle region ~~tile~~ group from adjacent spatial rectangle region ~~tile~~ groups on the basis of the received information so as to define a hierarchical structure of the spatial rectangle region ~~tile~~ groups;

assigning identification information uniquely identifying each node to each node in the hierarchal structure;

receiving key information to be used to decrypt a desired spatial rectangle region ~~tile~~ group of an upper layer containing an encrypted spatial rectangle region~~tile~~;

executing, up to a ~~tile~~ node located at a terminal from a node corresponding to the received key information, processing for generating key information for a ~~lower layer of the tile group indicated by the key information~~ node of interest on the basis of the received or generated key information for a node located at an upper layer in the hierarchal structure, the identification information assigned to the node of interest, and a one-way function so as to generate the key information for each spatial rectangle region~~tile~~; and

decrypting the encoded data of each encrypted spatial rectangle region ~~tile~~ by using the key information generated for each spatial rectangle region~~tile~~.

10. (Currently Amended) An information processing apparatus for receiving information containing encoded image data compression-coded for each spatial rectangle region which constitutes an image, said encoded image data containing ~~of~~ both of encrypted and unencrypted spatial rectangle regions ~~tiles~~ and reproducing an image comprising:

means for repeatedly forming one spatial rectangle region ~~tile~~ group from a plurality of adjacent spatial rectangle regions ~~tiles~~ in an image space and another spatial rectangle region ~~tile~~ group from adjacent spatial rectangle region ~~tile~~ groups on the basis of the received information so as to define a hierarchical structure of the spatial rectangle region ~~tile~~ groups;

means for assigning identification information uniquely identifying each node to each node in the hierarchal structure;

means for receiving key information to be used to decrypt a desired spatial rectangle region ~~tile~~ group of an upper layer containing an encrypted spatial rectangle region~~tile~~;

means for executing, up to a ~~tile~~ node located at a terminal from a node corresponding to the received key information, processing for generating key information ~~for a lower layer of the tile group indicated by the key information~~ node of interest on the basis of the received or generated key information for a node located at an upper layer in the hierarchal structure, the identification information assigned to the node of interest, and a one-way function so as to generate key information for each spatial rectangle region~~tile~~; and

means for decrypting the encoded data of each encrypted spatial rectangle region ~~tile~~ by using the key information generated for each spatial rectangle region~~tile~~.

11-13. (Canceled)

14. (Currently Amended) A server which is connected to a network for providing a decryption key for an image containing encoded data of both encrypted and unencrypted spatial rectangle regions~~tiles~~, comprising:

means for storing basic decryption key information and identification information, where the basic decryption key information corresponds to~~located at~~ an uppermost layer of the image which has a hierarchical structure constructed by repeatedly forming one spatial rectangle region ~~tile~~ group from a plurality of adjacent spatial rectangle regions ~~tiles~~ in an image space and another spatial rectangle region ~~tile~~ group from adjacent spatial rectangle region ~~tile~~ groups, and where the identification information uniquely identifies each node in the hierarchical structure; and

deriving, means for, when information that designates a spatial rectangle region ~~tile~~ group in a layer to be decrypted is received from a client on the network, sequentially deriving decryption key information for a node of interest from the basic decryption key ~~to a lower layer~~ or derived decryption key for a node at an upper layer in the hierarchical structure, the identification information of the node of interest, and a one-way function until reaching the designated spatial rectangle region ~~tile~~ group of the designated layer~~, by using a one-way function~~ and, when decryption key information for the designated spatial rectangle region ~~tile~~ group is generated, notifying the client of the decryption key information.

15-16. (Canceled)